

# A Report on Missouri's Economic Condition

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November 2001

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## Foreword

The purpose of this report is to answer a very basic question: Now that it has been determined the U.S. economy is in recession, what is its impact on Missouri?

This is a very important question to answer because in difficult economic times we must monitor the latest national and state data that is available to ensure we have an accurate assessment of Missouri's economic conditions at all times. Current and accurate economic data is essential to our state's ability to take the steps necessary to minimize the impact of this downturn and reap the benefits of a recovery as quickly as possible.

All of this information was developed in cooperation with the Missouri Department of Economic Development, Department of Revenue, Department of Labor and Industrial Relations, and the Office of Administration's Division of Budget and Planning. Periodically, we will update parts of this report.

During these difficult times it is important for all of us – both in the private and public sectors – to work together. By working together we can develop effective long range plans to make certain the benefits of future economic expansions can be enjoyed by all Missourians.

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## Executive Summary

This briefing is being provided to help everyone understand what factors are contributing to Missouri's current economic woes.

Using the latest data available for Missouri and the United States, it is apparent that Missouri is feeling the effects of the now announced national recession.

On Monday the National Bureau of Economic Research (NBER) Business Cycle Dating Committee announced that a 10-year economic expansion – the longest in U.S. history – ended last March. The nation and Missouri have been in a recession since then. The U.S. economy has been slowing since at least mid-2000.

Although conditions are subject to change, based on current conditions most consensus forecasts expect the current economic slowdown to last until late summer of 2002.

One of the biggest factors in how long the recession lasts relates to the current war on terrorism, which began with the tragic events of September 11, and the ongoing downturn of consumer spending.

Missouri, like the rest of the nation, has been hit hard in the travel/tourism industry as a result of the events of September 11. There have been approximately 1,000 layoffs in the airline and related industries alone in Missouri, which amounts to \$37.2 million in lost wages and \$3.7 million in net state tax revenues in 2001. More layoffs are possible. Conventions and business travel, which contribute heavily to the economies of our larger cities and the Lake of the Ozarks, has been reduced. Clearly, September 11 has impacted our economy, though not as much as the more broad-based decline that began in the early spring. For example, in the past year Missouri has lost nearly 25,000 manufacturing jobs, the fourth largest percentage decrease in the nation.

The sooner consumers re-gain confidence and return to normal spending patterns, the sooner our economy will rebound. However, further attacks, fears of attacks on the United States, or an extended war effort would likely have an adverse impact on our economy.

It is difficult to determine exactly when the recession began in Missouri without more complete data however, it likely began no later than the 2<sup>nd</sup> quarter of this year.



## Defining A Recession

There are several ways to define a recession. The Business Cycle Dating Committee defines it this way: *A recession is a significant decline in economic activity, spread across the economy, lasting more than a few months, visible in employment, real income, industrial production, and wholesale-retail trade.*

Using this definition there is considerable evidence of the recession in Missouri. There are other measures of a recession, including Gross Domestic Product, which is the broadest measure of national economic activity. Generally, a recession involves at least two quarters in which GDP decreases. This threshold will likely be met at the end of the 4<sup>th</sup> quarter.

For purposes of our study, we have looked in depth at four sets of indicators, which are similar to those used by NBER: 1) Employment; 2) Personal Income; 3) Manufacturing and Industrial Vitality; 4) Retail Trade and Taxable Sales.

### Employment

Payroll employment is probably the single most reliable indicator of a recession. Since January of 2001, Missouri's employment figures have been declining, while U.S. employment did not start declining until April of this year.

Between January and October, Missouri lost 56,700 nonfarm payroll jobs (on a seasonally adjusted basis), or 2 percent.

Unlike the recessions of 1982 and 1990-91, where manufacturing experienced the greatest job loss, current job loss is being experienced almost equally by Missouri's service and manufacturing sectors.

Over the last 20 years in Missouri, decreases in seasonally adjusted non-farm employment of greater than 20,000 jobs over any three-month period were only experienced during general recessions. This occurred from April 1982 through December 1982 and September 1990 through June 1991. These recession-like employment conditions currently exist in Missouri, beginning in April 2000 and extending through the latest quarter.

If current economic conditions prove consistent with those of 1982 and 1990-91, decreases in non-farm employment in Missouri will last through the first quarter of 2002.

Employment data collected for October shows that while Missouri's unemployment rate remained steady at 4.0 percent, the seasonally adjusted rate increased three-tenths of a point to 4.5. This relates to total unemployment of 132,242 individuals. By comparison,

the national adjusted rate shot up a half point to 5.4 percent. (Traditionally, Missouri's seasonally adjusted rate is one-half to one point below the national adjusted rate)

From October 2000 to October 2001, the seasonally adjusted unemployment rate for both Missouri and the U.S. have increased about 1.5 percent.

Nine Missouri counties have had unemployment increase by more than 2 percent between October of 2000 and October of 2001. Those are, by region: Pettis 3.4, Saline 3.2, and Cooper 2.2; Franklin 3.0, Gasconade 2.9; Washington 2.5; and Jefferson 2.3; Bollinger 3.4; and Douglas 3.9. Twenty-one counties have had a decrease in unemployment during that time period.

## Personal Income

Missouri continues to rank 18<sup>th</sup> nationally in personal income, and ranks above all neighboring states except for Illinois. Personal income growth has slowed recently, but according to the latest data it has remained positive both in Missouri and nationally.

Missouri's personal income grew 0.73 percent between the 1<sup>st</sup> and 2<sup>nd</sup> quarter of 2001, compared with a national growth of 0.83 percent. Overall, Missouri was ranked 28<sup>th</sup> in personal income growth for the 2<sup>nd</sup> quarter of 2001. During the same period in 2000, Missouri's personal income growth was 2.22 percent.

However, Missouri's personal income growth has been lagging behind the national growth since the 2<sup>nd</sup> quarter of 2000.

The fact that personal income growth has remained positive, even though it has slowed considerably, is not necessarily an indication the economy is not in recession. Personal income has not fallen substantially in five of the past nine recessions.

## Manufacturing And Industrial Vitality

For more than a year, industrial production has been decreasing across the nation. Although the decrease slowed early in 2001, the decreases have become larger in recent months. No data is available for Missouri's industrial production.

Manufacturing employment has been falling both nationally and in Missouri.

In the United States, manufacturing employment peaked in April of 1999. From then until July 2000 there was a relatively slow rate of decline. Since then, job loss has sharply accelerated.

The manufacturing downturn in Missouri has been somewhat different. Missouri's manufacturing employment reached a peak in April of 1995. Although there were ups and downs, its level did not sharply change until April of 1999, when more significant job loss began. Since July of 2000, the decreases have been even more rapid.

In the past year, manufacturing employment has decreased by over 950,000 nationwide. Missouri has lost nearly 25,000 manufacturing jobs – a decrease of 6.18 percent – the fourth largest in the U.S.

In the 3<sup>rd</sup> quarter of 2001, Missouri had 22 mass layoff events, leading to the separation of 4,603 workers from their jobs for 30 days or more. Thirteen of these were in manufacturing, resulting in the separation of 3,071 workers from their jobs for 30 days or more. (Eight of these manufacturing-related events were the result of a lack of demand for employers' products and services, or slack work. This impacted 2,215 workers.) This is the most layoff events and highest number of separations in manufacturing since the 2<sup>nd</sup> quarter of 1998 with 15 events and 5,117 impacted workers.

By comparison, there were 12 mass layoff events in the manufacturing sector leading to 2,043 employee separations for the 2<sup>nd</sup> quarter of 2001. In comparison, in the 3<sup>rd</sup> quarter of 2000, there were just eight events and 880 employees impacted.

Missouri's Purchasing Managers' Index (PMI) score, (prepared by Creighton University) which measures such factors as new orders, production, supplier delivery times, backlogs, inventories, prices, employment, and import orders and exports, have been below 50 eight of the last 10 months. Typically, a score greater than 50 indicates an expansionary economy, while a score below 50 forecasts a sluggish economy for the next three to six months. Missouri's October score of 46, down from 46.9 in September, ranked Missouri above the nationwide index for the first time in three months. The national PMI fell drastically from 47 in September to 39.8 in October.

## Retail Trade & Taxable Sales

Retail sales have been weakening since early 2000 nationally. Starting around May of 2001, retail sales growth came virtually to a halt. Following September 11, sales declined dramatically as consumer confidence fell and many individuals stayed out of stores and restaurants and did not travel. There was an exceptionally strong rebound in October, largely because of record auto sales from zero interest financing and other incentives.

A great deal of attention is focused on this year's holiday buying season which is being viewed as a "make-or-break" period for retailers and as an indication of consumer confidence.

Based on reporting from the Missouri Department of Revenue, we believe that growth in taxable sales (inflation and seasonally adjusted) in Missouri have been zero or negative

since the 3<sup>rd</sup> quarter of 2000. In the 2<sup>nd</sup> quarter of 2001 it was negative 1.3 percent. For the 3<sup>rd</sup> quarter of 2001 it was negative 1.8 percent. (Based on year-to-year growth)

There is no consumer confidence index for Missouri, however, national figures show a national drop of 11.5 points in October from the revised 97.0 in September. This was much lower than the original forecasts of 95.9 and the lowest since February of 1994.

## **ECONOMIC FORECAST**

While most economists now acknowledge the United States is in a recession, there is now considerable speculation about when our recession will end and what its ultimate impact will be on our economy. There are a wide range of scenarios being offered – some good and some bad. Many argue that this is a normal downturn in the business cycle, somewhat comparable to the 1990-91 recession associated with the Gulf War.

U.S. Commerce Secretary Dan Evans said recently he believes that the recession will be over very early next year.

Another scenario was tied to the nation's war on terrorism and suggested that if there were no further attacks on the United States and major progress was being made by U.S. troops by Thanksgiving, the economy would rebound by next spring. A worst case scenario of additional attacks within the United States suggested the downturn could last throughout 2002.

The fact is, no one really knows for sure what will happen. The tragic events of September 11 have cast a cloud of uncertainty over our state and nation. The sooner consumers have the confidence to return to normal activities, the sooner our economy will recover.

We do not know the future. But we do know where our economy is today and how past economic downturns have impacted us. And, based on that knowledge, we believe that over the next several months the current economic downturn will continue to have a negative impact on Missouri. Hopefully by late summer of 2002, the economic downturn will have ended and a recovery will be evident.

## What Is A Recession?

*A recession is a significant decline in economic activity, spread across the economy, lasting more than a few months, visible in employment, real income, industrial production, and wholesale-retail trade.<sup>1</sup>*

A widely used rule of thumb is that a recession involves at least two consecutive quarters in which Gross Domestic Product (GDP) decreases. Although this is frequently true in recessions, it is not part of any official definition. Indeed, there is no clear-cut official definition of what constitutes a recession, and no government statistical agency makes the determination of when a recession begins and ends.

The generally accepted dating of business cycles is done by the Business Cycle Dating Committee of the National Bureau of Economic Research (NBER), a private research organization. The committee is composed of half a dozen well-known economists. The Committee announced on Monday that, as suspected, a recession had already begun. March 2001 marked the beginning of the recession, ending 10 years of strong economic growth.

Dating of business cycle turning points is done considerably after the fact, to make sure that a decline is large enough and long enough to qualify as a recession and that the economy has truly turned to recovery before designating a trough. The last recession began in July 1990 (peak) and ended in March 1991 (trough). These designations were announced by the NBER in April 1991 and December 1992, respectively. In other words, the recession was actually over before a formal recession had been declared. Recovery had been in progress for more than a year and a half before the trough was announced. This unusually long delay in announcing the trough was due to the slow growth that occurred in 1991 and 1992. It simply wasn't clear for a long time that the economy had truly turned the corner.

GDP does of course represent the broadest measure of national economic activity. Thus, declines in this measure generally represent economy-wide changes. However, the fact that it is quarterly data, often subject to considerable revision, makes it a rather crude measure of determining business cycle turning points. Thus, the Committee generally uses monthly indicators.

Traditionally, four main indicators have been used, although there is no fixed rule concerning this. The first two are economy-wide indicators. One of these is nonfarm payroll employment, as produced by the U.S. Department of Labor, Bureau of Labor Statistics (BLS). (The Missouri Department of Economic Development, MERIC, in cooperation with BLS, produces corresponding Missouri data.) The second main monthly indicator is real personal income less transfer payments. The other two monthly indicators relate to manufacturing and goods. These are real manufacturing and trade

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<sup>1</sup> National Bureau of Economic Research, Business Cycle Dating Committee, "The NBER's Recession Dating Procedure," November 9, 2001

sales, and industrial production. Since manufacturing has become a smaller part of the economy, these two indicators may show different movements than the others that tend to relate to the overall economy.

As the U.S. economy has been slowing since at least mid-2000, there has been much talk about recession. The “R-word” was usually avoided in official circles; the economy was seen as slowing down but as not yet contracting in the broad way that usual definitions of recession require.

### **Low Points of Last Ten US Recessions**

October 1945  
October 1949  
May 1954  
April 1958  
February 1961  
November 1970  
March 1975  
July 1980  
November 1982  
March 1991

Indeed, the slowdown that has been going on for more than a year has largely involved contraction of the manufacturing sector. Real manufacturing and trade sales peaked about a year ago<sup>2</sup>, and industrial production has been falling since September 2000. In fact, the decline of 6.5 percent in industrial production between September 2000 and October 2001 has already been greater than that experienced in the 1990-91 recession (4.6 percent, which has also the average for the past six recessions).

With the events of September 11, “recession” seemed to become much more of a certainty. The economy had been continuing to weaken prior to September, and many analysts considered it to have been teetering on the brink of recession. The aftermath of September 11 was seen as almost certain to push the economy over that brink. The only question was how deep and how long would a recession be.

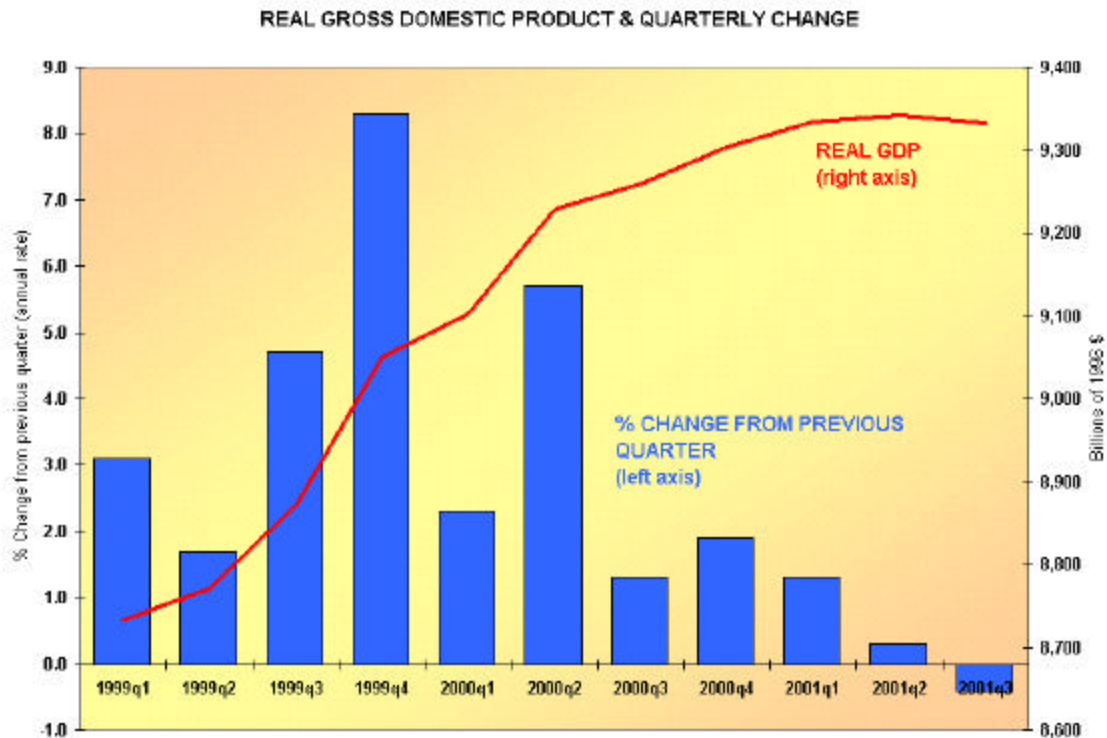
## **Indicators of an Economy in Recession**

### **Gross Domestic Product**

Data relating to the broadest measure of economic activity in the U.S. – Gross Domestic Product – had been showing growth slowing toward zero since late 2000. Second quarter 2001 (April - June) growth was only 0.3 percent (revised.) Advance estimates for the third quarter were released on October 31. These data showed real (inflation-adjusted) GDP to have contracted at a 0.4 percent annual rate in the July-September period.

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<sup>2</sup> NBER.



Although this decrease was smaller than had been widely expected, it did mark a contraction in the overall economy, and one that by and large had preceded September 11. With most analysts assuming the fourth quarter would show more substantial decreases somewhere between 1.5 and 2.0 percent, it is quite likely that we will have at least two quarters of declining GDP.

Thus, the frequently used rule-of-thumb definition of two quarters of declining GDP denoting a recession would be met. This coincides with the findings of the NBER, that “a significant decline in activity spread across the economy, lasting more than a few months, visible in employment, real income, industrial production, and wholesale-retail trade” has taken place at the national level. But has an economic recession occurred in Missouri?

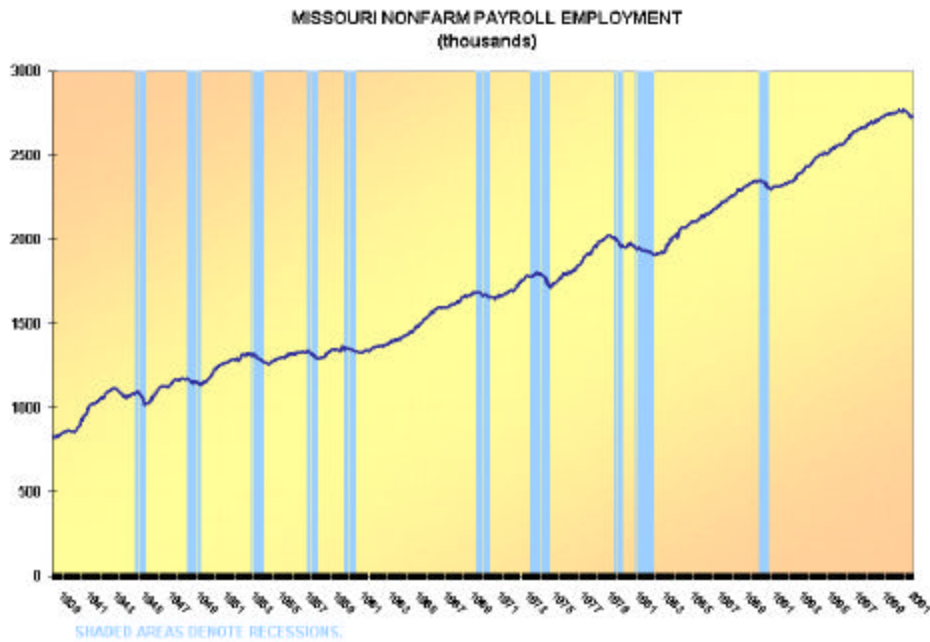
## Employment

Payroll employment growth is probably the most reliable single indicator of a recession. This is fortunate, since current monthly data are available for both the U.S. and Missouri, and are available on a seasonally adjusted basis, to help separate out underlying economic movements from purely seasonal ones. These data are quite telling.

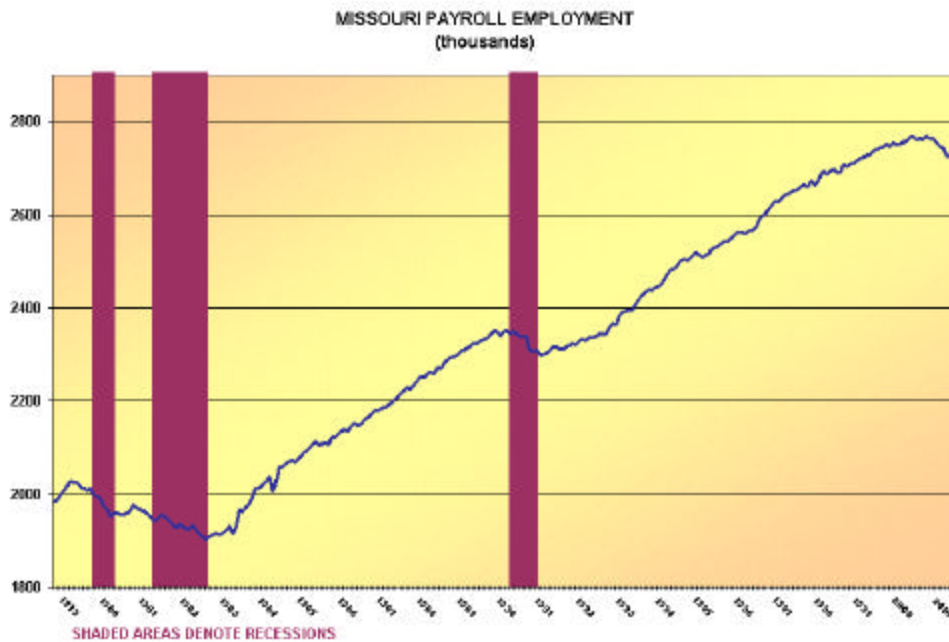
The chart on the following page shows Missouri nonfarm payroll employment since 1939. Recessions during this time period are shown as shaded areas on the chart. Employment turns down quite noticeably in each recession, and turning points in the



employment series correspond fairly closely to peaks and troughs in overall economic activity.

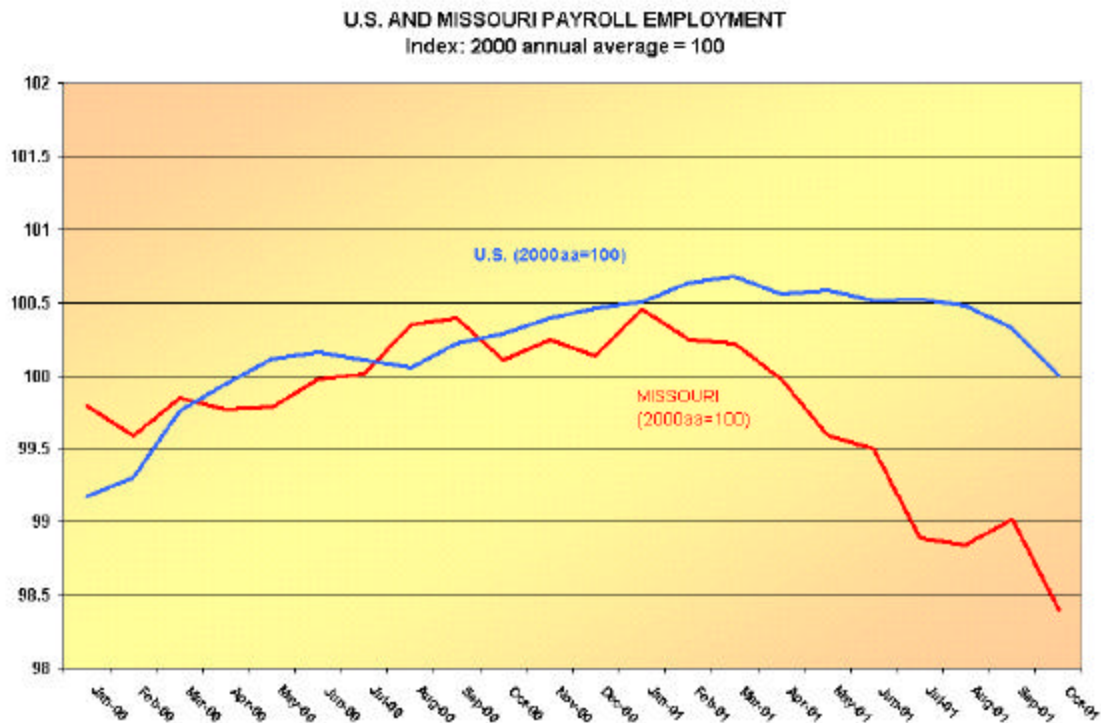


A more recent time period is shown in the following chart. Note on this chart that employment has been heading downward since January 2001, with a magnitude of loss between January and September similar to that experienced in the most recent recessions. Please see the appendix for further information on job losses during recessions.





The chart below shows both U.S. and Missouri payroll employment since January 2000. (To display these employment data in comparable form, index numbers have been used. The 2000 annual average employment level in each area represents 100.) Note that a slowing of growth and some irregularity of monthly change preceded actual downturn. This is typical of employment change immediately prior to recession, as the economy slows and different sectors become affected by the increasingly pervasive decline.



Missouri employment leveled off in the middle of 2000 before finally peaking in January 2001. National employment continued to grow until March. The pace of national decline was relatively slow in the first months. In September, job loss accelerated. It should be noted that the September data actually represent economic activity immediately prior to the terrorist attacks of September 11, and show an economy already in trouble. The October data – the first measure following September 11 -- show a much sharper decline. Indeed, the 415,000 job loss in the U.S. in October (seasonally adjusted basis) was the largest single-month loss since 1980. The unemployment rate also went up half a point in October, the largest monthly increase since 1986.

The Missouri data show a much more rapid loss of jobs following the peak in January, with only a brief respite in the July-September period. Between January and October, Missouri lost 56,700 nonfarm payroll jobs (on a seasonally adjusted basis), or 2 percent. The annual rate of decline is even worse, since only nine months are involved: about 2.7 percent.

**Missouri job losses between January and October are already greater than the numerical loss in the 1990-91 recession, and only slightly less in percentage terms.**

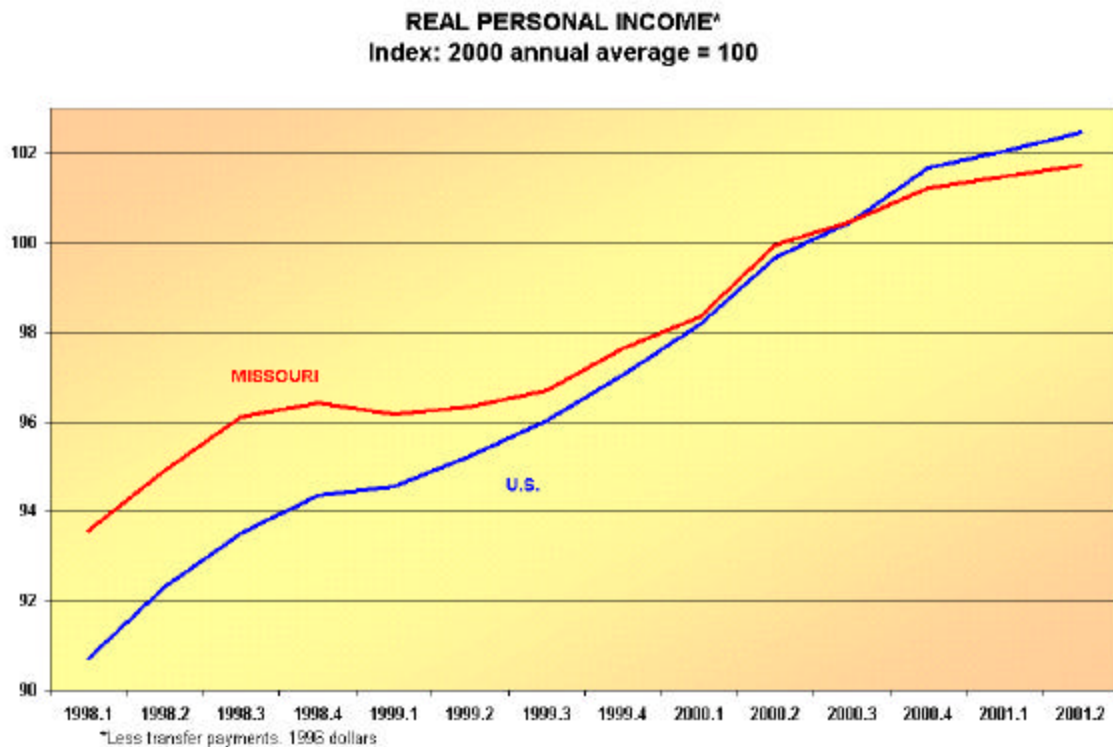
## Personal Income

Personal income is a broad measure of economic activity and one for which relatively current data are available, especially at the national level.

The NBER follows a measure consisting of personal income less transfer payments, adjusted for inflation.

Monthly national data through September do not yet show a contraction in personal income.

Quarterly data, for both the U.S. and Missouri, show a similar development through the second quarter of 2001.



To show the vastly different levels of total personal income for the U.S. and Missouri on the same chart, these data have been converted to index numbers.

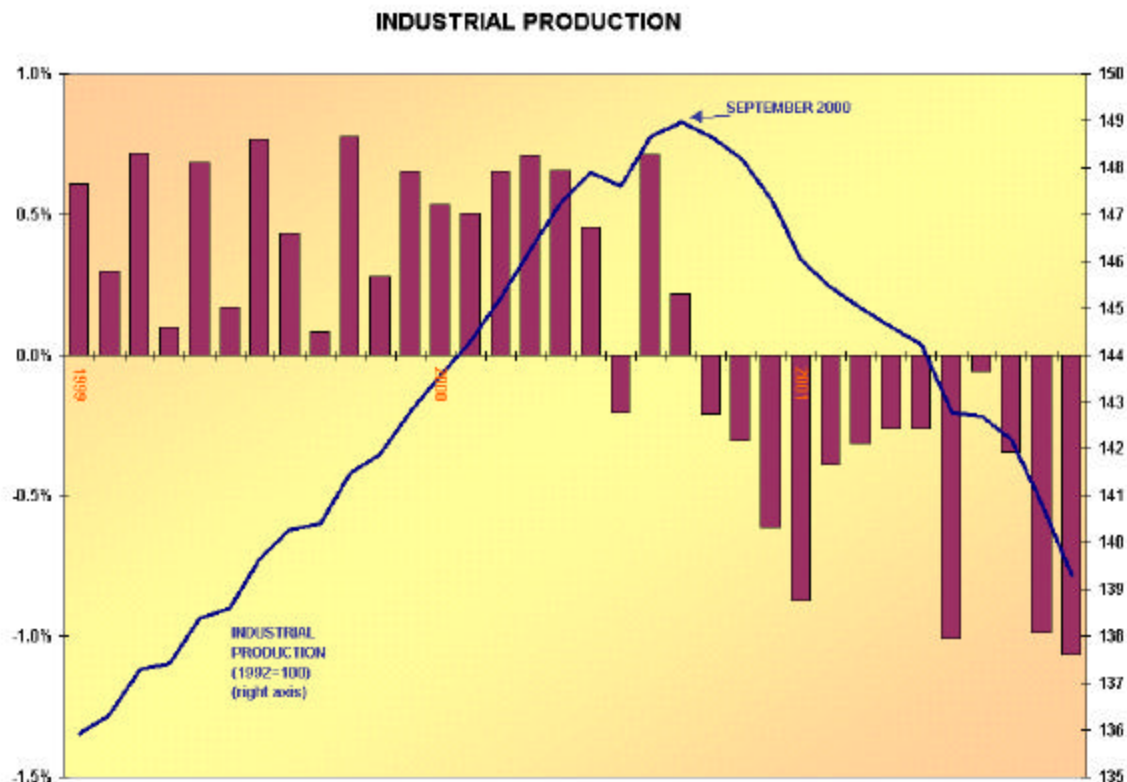
Personal income growth has slowed recently, but remained positive through the latest available data. This is not necessarily an indication that the economy is not in recession,

however. As the NBER has noted, real income has not fallen substantially in five of the past nine recessions.<sup>3</sup> The appendix presents a further discussion of personal income.

## Manufacturing & Industrial Vitality

Industrial production has been decreasing for more than a year. Although the decrease slowed early in 2001, the decreases have become larger in recent months.

This measure is heavily dependent on manufacturing activity, and the decreases in production reflect the problems manufacturing has been experiencing. A strong dollar has made American products less competitive in global markets, and the resulting drop in exports has hurt manufacturing profits. Cutbacks in production and employment have been the order of the day, and plant closings and layoffs have been almost daily fare in the news.



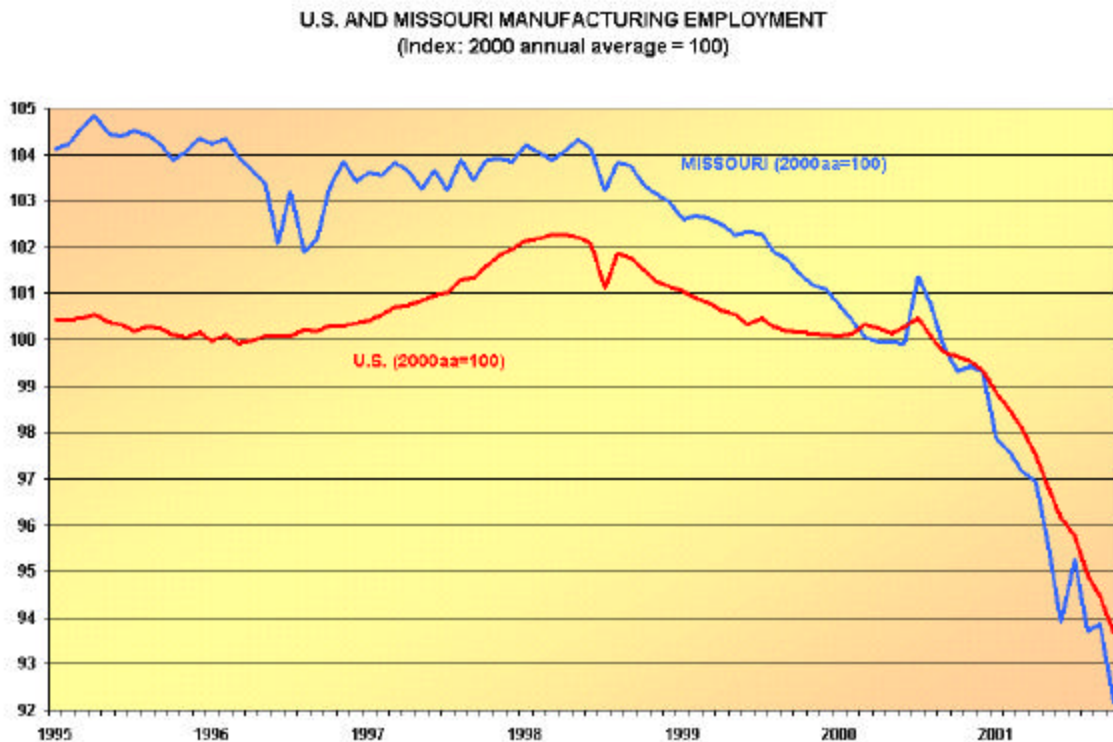
Manufacturing employment should move somewhat consistently with industrial production. Manufacturing employment has been falling in the U.S. Its decrease in Missouri has been even more precipitous.

<sup>3</sup> NBER.

The long-term trend in manufacturing employment has been downward, if for no other reason than that increasing productivity allows the same amount of goods to be produced with fewer workers. Manufacturing employment tends to drop during recessions. Even though it recovers following the economic trough, its next peak generally is lower than the previous one.

In the U.S., manufacturing employment experienced a recent peak in April 1999. From then until July 2000, a relatively slow rate of decline occurred. Following July 2000, job loss has sharply accelerated.

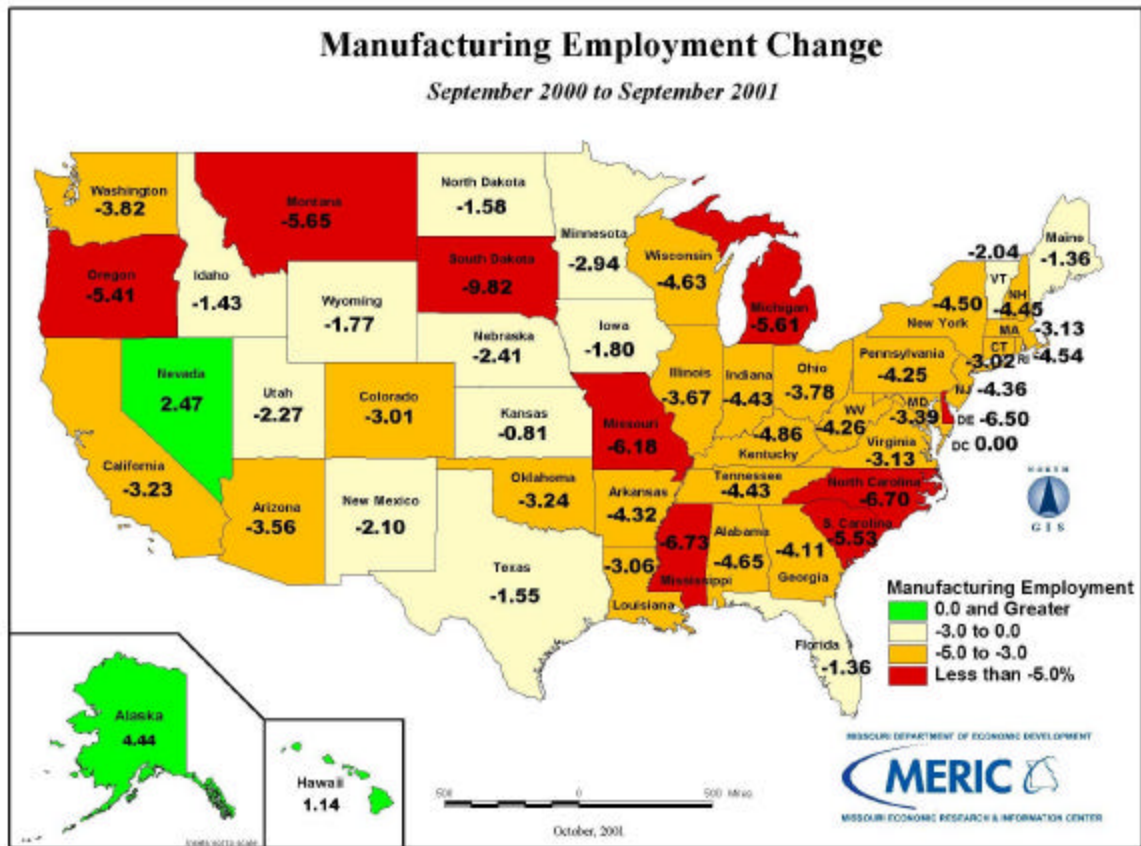
The timing of the manufacturing downturn in Missouri has been somewhat different.<sup>4</sup> Missouri's manufacturing employment reached a recent peak in April 1995. Although there were ups and downs, its level did not sharply change until May 1999, when more significant job loss began, in consonance with national manufacturing cutbacks. Since July 2000, the decreases have been even more rapid.



Again, manufacturing employment had been a drag on the economy, and the losses in such a key sector were obviously of considerable concern. But manufacturing job losses, by themselves, were not yet enough to represent the broad contraction of economic activity that characterizes recessions. The economic slowdown initially was confined largely to the manufacturing sector.

<sup>4</sup> To facilitate comparison of U.S. and Missouri manufacturing employment, the data have been converted to index numbers, where annual average employment in 2000 = 100.

The map below gives a better picture of the decrease in manufacturing employment over the last twelve months. Manufacturing employment has dropped by over 950,000 across the U.S. during the past 12 months. The loss of nearly 25,000 manufacturing jobs in Missouri is a 6.18% decrease. This decrease is the fourth largest among the states, behind only South Dakota (9.82%), Mississippi (6.73%), and North Carolina (6.7%).



## Retail Trade & Taxable Sales

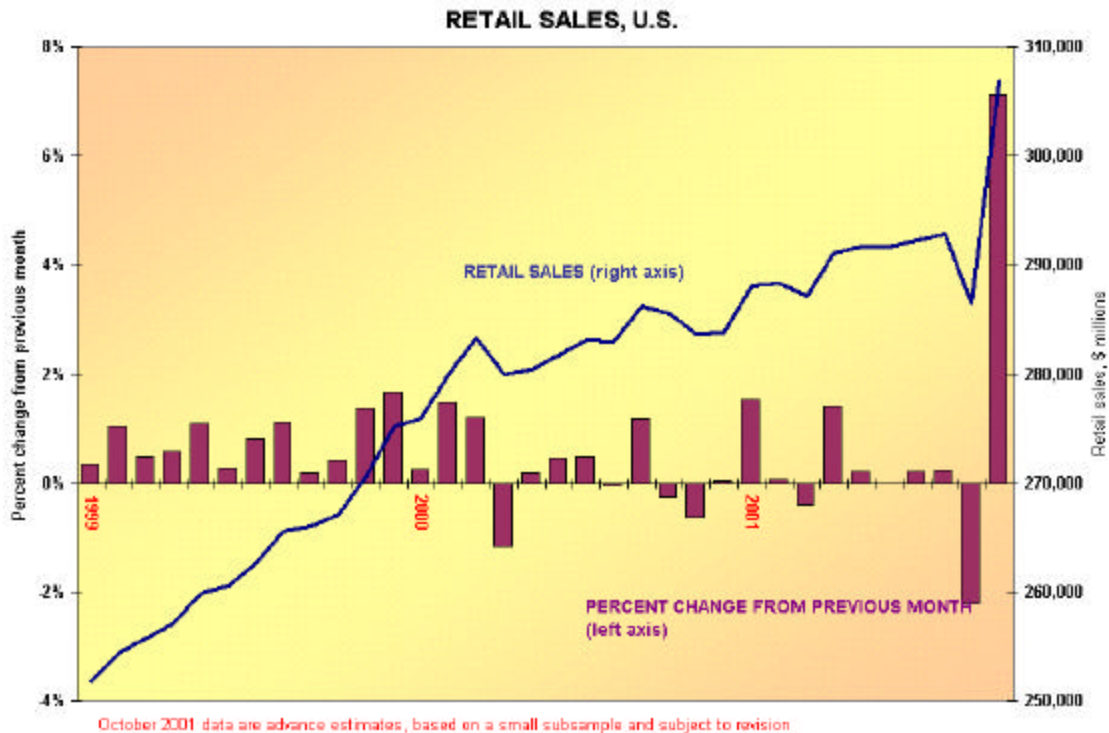
In general, a recession also involves a contraction in trade.

Retail sales have been weakening since early 2000. There have been enough relatively strong months to keep the overall trend upward, however. Starting around May 2001, retail sales growth came virtually to a halt. Following September 11, sales fell off precipitously, as consumer confidence tanked and many individuals stayed out of stores and restaurants. (Refer to the appendix for a discussion of consumer confidence.) Advance data for October surprised analysts with an exceptionally strong rebound. Record sales of automobiles, spurred by extremely successful zero-interest financing and



other incentives, were largely responsible. There is a danger in this; these sales may merely represent borrowing strength from upcoming quarters, in which drops in sales are likely to occur.

Much significance is being placed on this year's holiday buying season; it seems to be a "make-or-break" period for retailers. In theory, consumers have extra money to spend this year, with tax rebates, lower gas prices, declining credit card debt, and money that normally would have been spent on travel. The National Retail Foundation predicts holiday sales to increase between 2.5 and 3.0 percent from last year. However, this is nearly equal to the current rate of inflation, which implies little real growth in retail sales during the next quarter. Further, with 82 percent of people surveyed by the Consumer Federation of America planning to shop at discount stores this year, the movement of dollars from department and specialty stores to discounters is probable.



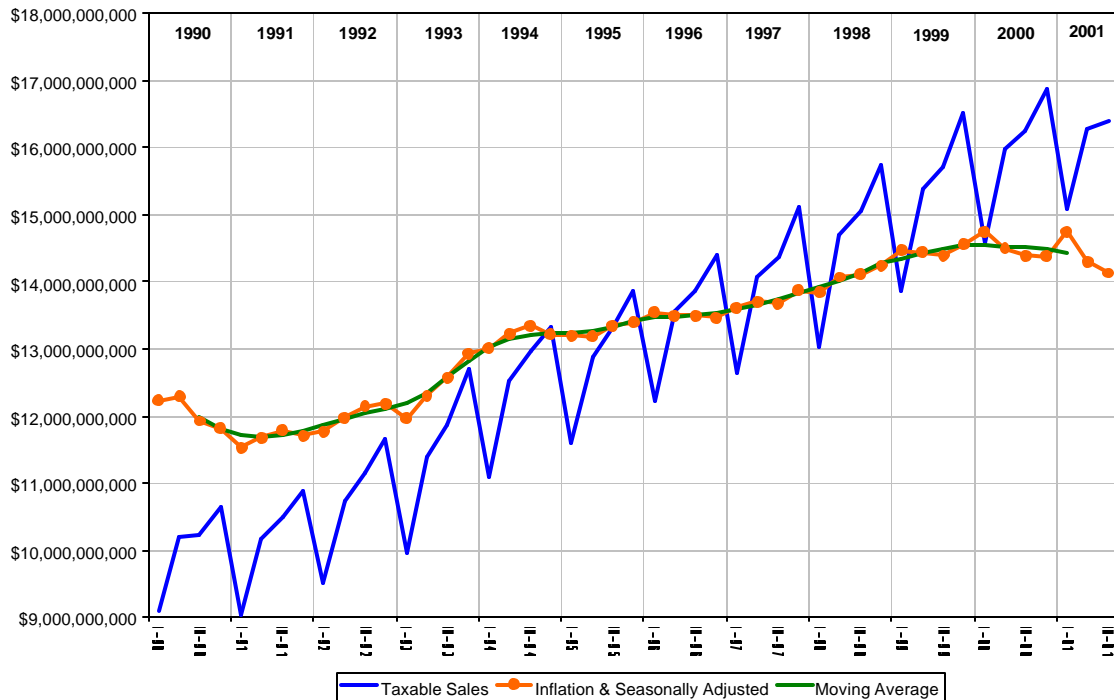
While no specific retail sales data are readily available for Missouri, total taxable sales as measured by the Missouri Department of Revenue (DOR) can serve as a proxy measure. Retail sales account for approximately 70% of taxable sales in Missouri, with an additional 10% from wholesale trade, 10% from service industries such as hotels and amusement parks, 5% from communications industries, and 5% from other industries.

DOR recently released preliminary taxable sales estimates for the 3rd Quarter of 2001. During the quarter, \$16.4 billion in taxable transactions occurred in the state, an increase of only 0.8% from the same quarter of 2000. This is much lower than the 3.5% annual growth realized during the 3rd quarter of 2000, as well as the 3.4% growth during the first quarter of this year. (See the table below.)

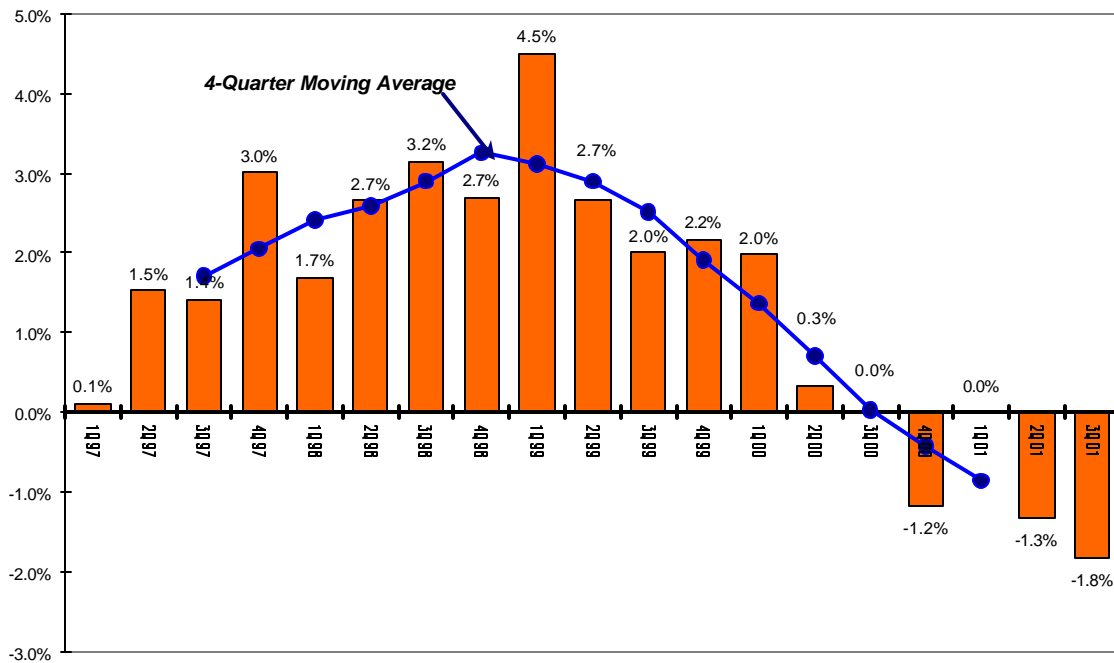
Analysis by MERIC shows that if seasonal and inflationary effects are removed from the data, further evidence of sluggish sales can be seen. Year-to-year growth during the 3rd quarter of 2001 was -1.8%. This is the fifth consecutive quarter of zero-to-negative growth in taxable sales in Missouri. The appendix presents a further discussion of taxable sales on a regional basis in Missouri.

Taxable Sales in Missouri				
	Taxable Sales (\$B)	% Change from Year Ago	Inflation & Seasonally Adjusted (\$B-96)	% Change from Year Ago (Adjusted)
1Q97	12.6	3.3%	13.6	0.1%
2Q97	14.1	5.1%	13.7	1.5%
3Q97	14.4	3.3%	13.7	1.4%
4Q97	15.1	4.8%	13.9	3.0%
1Q98	13.0	4.3%	13.8	1.7%
2Q98	14.7	4.3%	14.1	2.7%
3Q98	15.0	4.8%	14.1	3.2%
4Q98	15.7	4.3%	14.2	2.7%
1Q99	13.9	6.2%	14.5	4.5%
2Q99	15.4	4.8%	14.4	2.7%
3Q99	15.7	4.4%	14.4	2.0%
4Q99	16.5	4.8%	14.6	2.2%
1Q00	14.6	5.3%	14.7	2.0%
2Q00	16.0	3.7%	14.5	0.3%
3Q00	16.3	3.5%	14.4	0.0%
4Q00	16.9	2.2%	14.4	-1.2%
1Q01	15.1	3.4%	14.7	0.0%
2Q01	16.3	2.0%	14.3	-1.3%
3Q01	16.4	0.8%	14.1	-1.8%

## Taxable Sales in Missouri



## Year-to-Year Percentage Change in Taxable Sales (Inflation and Seasonally Adjusted)





## Labor Market Conditions in October

Missouri labor market conditions deteriorated in the wake of September 11 events, with employment dropping off sharply but unemployment increasing only a little. October data show that the state's seasonally adjusted unemployment rate increased three-tenths of a point to 4.5 percent. The national rate had shot up half a point to 5.4 percent.

Non-farm payroll employment in Missouri fell off sharply in October, on a seasonally adjusted basis, after being relatively stable in the previous two months. Employment dropped by 17,000 jobs to 2,713,500, for a single-month decrease of 0.6 percent. National employment fell by 415,000 or 0.3 percent between September and October but had also been dropping in the previous two months. Since July, Missouri and the U.S. have shed jobs at similar rates.

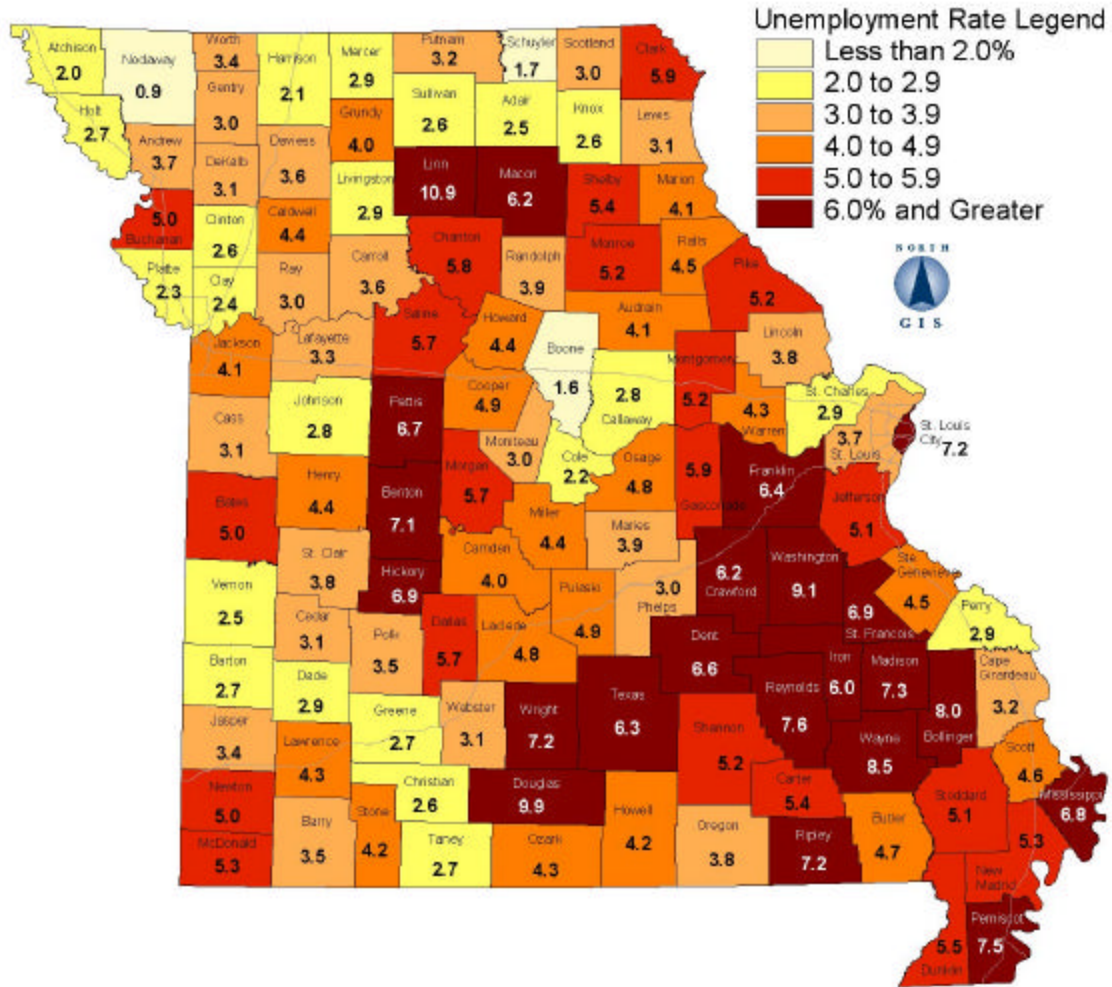
Over the past year, Missouri has lost 47,100 jobs, a decline of 1.7 percent. This has been much more rapid than the national decrease of 0.3 percent. Part of this difference is due to the fact that Missouri's employment has been decreasing for a longer period of time. Missouri's employment grew little in the latter part of 2000 and peaked in January 2001 while national employment continued to grow until March. Even so, Missouri employment has contracted more rapidly than national employment since March.

Manufacturing continued to lose jobs. The largest decrease, however, was a temporary layoff in the automobile industry in St. Louis (4,000 jobs), which has since ended. Food and kindred products manufacturing regained 1,000 jobs and returned to the July level of around 49,000. Construction employment lost 2,100 jobs at a time it should have been relatively stable. This industry is of course dependent on weather and other transitory conditions. Trade fell off sharply, with decreases in wholesale trade (particularly motor vehicles and parts) and food stores. Employment at eating and drinking places dropped seasonally.

The service industries were the only sector to show any strength. Business services continued the rebound started in September, and personal services edged up. Educational services increased seasonally.

Over the past year, Missouri payrolls have lost more than 47,000 jobs, or about 1.7 percent. Manufacturing and business services together have lost almost 43,000 jobs. Trade has lost 12,000 jobs, concentrated in wholesale trade and retail food stores. Communications employment is down by 4,300 jobs and air transportation by 1,700, even though most post-September layoffs had not yet occurred by the October reference week. Most service industries other than business services have shown some growth over the year, as has Finance, Insurance, and Real Estate. Construction has held its own.

## Unemployment Rate - October 2001



# Appendices

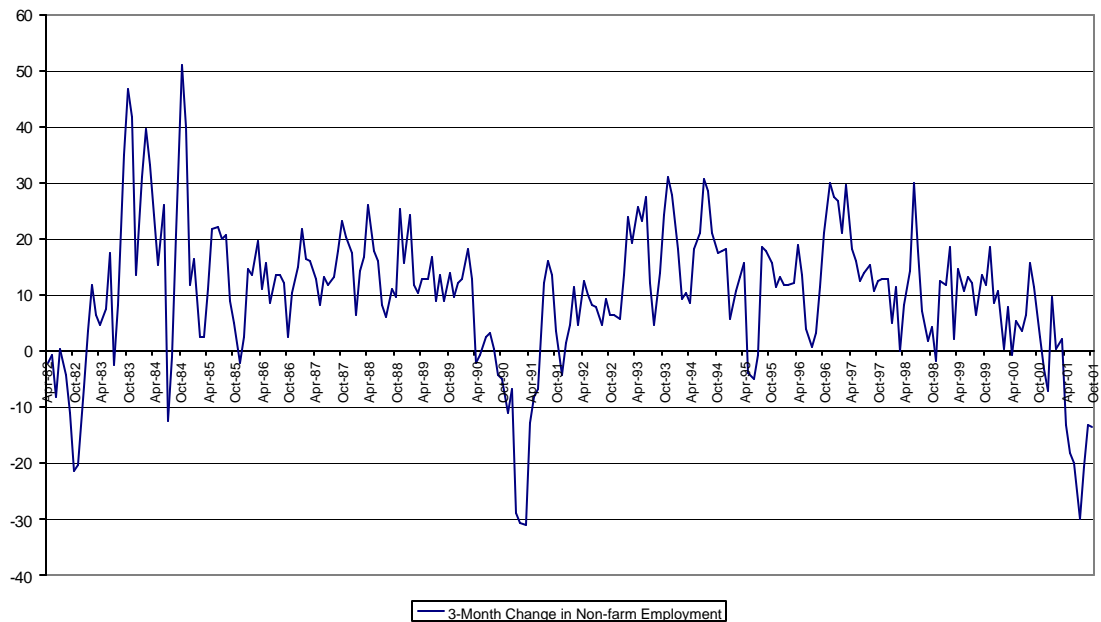
## Economic Downturn in Missouri

MERIC studied twenty years of Missouri employment data to better comprehend the current economic downturn. Recessions are determined on the basis of output, but perceived on the basis of employment.

### Key Findings:

- Missouri is currently experiencing decreases of over 20,000 non-farm jobs over progressively measured three-month periods. The only other times when this took place over the past twenty years were during the recessions of 1982 and 1990-91.
- By this standard, Missouri experienced recession-like employment conditions during April-June 2001 (-19,800 jobs), May-July 2001 (-29,800 jobs), and June-August 2001 (-20,500 jobs). Job loss while still indicating weakness was less dramatic during the period July-September (-13,300 jobs). The job loss projection for August-October indicates continuing weakness, but not at the level of the summer of 2001 (-13,600 jobs).
- During the recessions of 1982 and 1990-91, the primary source of job loss was the manufacturing sector (over 10,000 jobs lost during the 3-month period representing the depth of the recession). The sources of the job loss currently being experienced are almost equally divided between Missouri's service sector (-8,000 jobs) and manufacturing sector (-6,000 jobs).
- Over the twenty-year period of study, downturns in manufacturing were rarely experienced as recessions in the rest of Missouri's economy. Manufacturing job losses are only experienced as a general recession when the other sectors of the state's economy are experiencing negative or negligible job growth.
- If current economic conditions prove consistent with those of 1982 and 1990-91, decreases in non-farm employment will persist through the first quarter of 2002.
- The October projection is the only data point gathered after the events of September 11<sup>th</sup>. This is still a projection and must be carefully accessed, but weakness at the same level of the previous 3-month period could indicate the lengthening of a recession that was in the process of turning up.

**Change in Seasonally Adjusted Non-Farm Employment in Missouri  
(in thousands)**



Over the twenty-year period of study, decreases in seasonally adjusted non-farm employment of greater than 20,000 jobs over any three-month period were only experienced during general recessions. Note April 1982 through December 1982 and September 1990 through June 1991. These recession-like employment conditions currently exist in Missouri, beginning in April 2000.

## Personal Income

As predicted, the U.S. economy continues to lose steam, posting less than a 1% increase in personal income during the 2<sup>nd</sup> quarter of 2001. Nearly every state in the nation experienced slower growth in personal income during the 2<sup>nd</sup> quarter of 2001 than a year ago. The nation reported just over \$8.5 trillion in personal income in the 2<sup>nd</sup> quarter.

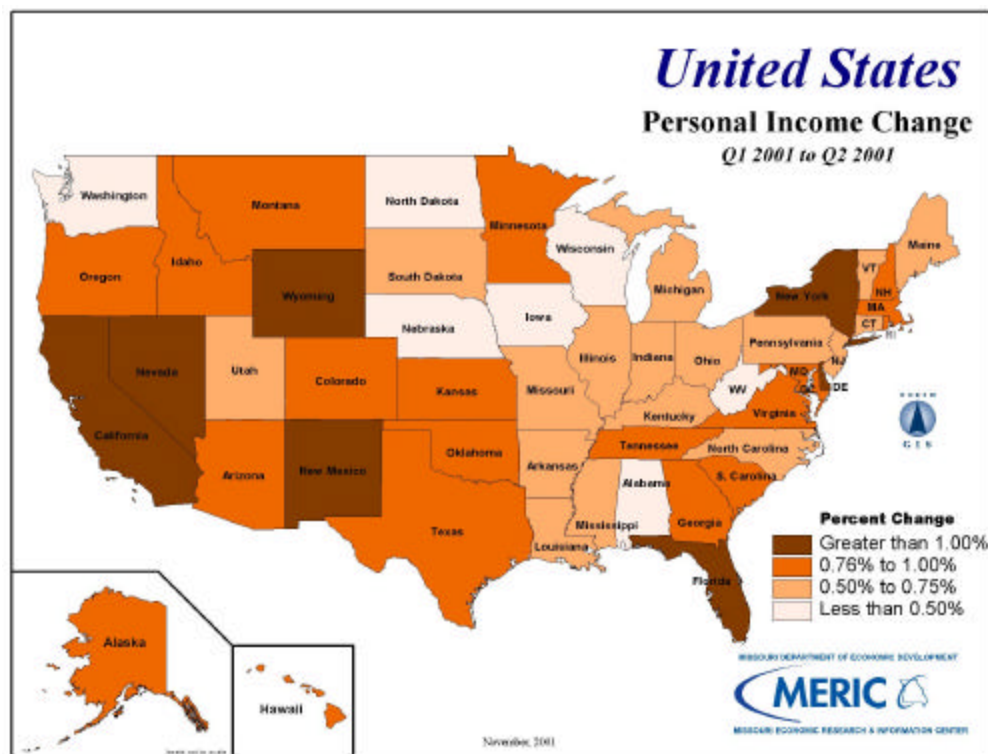
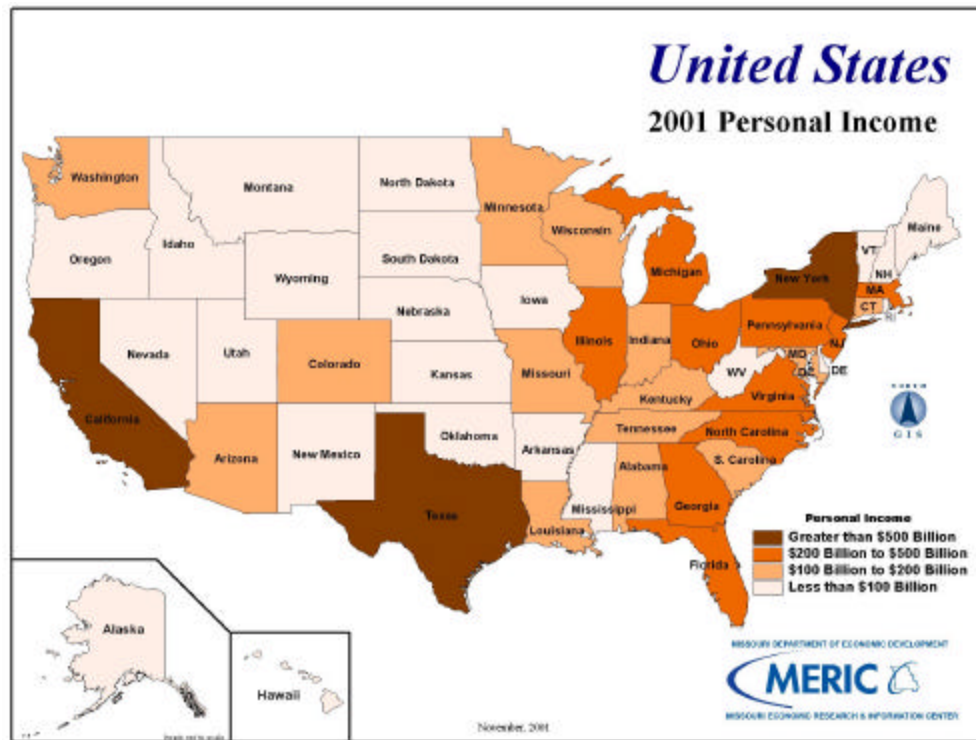
Missouri's personal income also experienced slight growth, 0.73%, between the 1<sup>st</sup> and 2<sup>nd</sup> quarter of 2001, 0.1 percentage points below the national growth of 0.83%. This was much smaller than Missouri's 2.22% growth experienced during the same time period in 2000. Overall, Missouri ranked 28<sup>th</sup> in personal income growth for the 2<sup>nd</sup> quarter of 2001.

Missouri continues to rank 18<sup>th</sup> nationally in total personal income. California continues to lead the nation in personal income followed by New York, Texas, Florida and Illinois, respectively. Alaska, Vermont, North Dakota and Wyoming continue to have the lowest personal income in the nation. Missouri compares favorably to surrounding states, trailing only Illinois in personal income. However, Tennessee, Kansas and Oklahoma experienced faster growth of personal income during the 2<sup>nd</sup> quarter of 2001.

2 <sup>nd</sup> Quarter 2001 Personal Income* Top 20 States		
State	Personal Income	Rank
California	\$1,150,660	1
New York	\$695,753	2
Texas	\$614,117	3
Florida	\$470,691	4
Illinois	\$414,130	5
Pennsylvania	\$380,549	6
Ohio	\$327,289	7
New Jersey	\$324,898	8
Michigan	\$297,261	9
Massachusetts	\$253,165	10
Georgia	\$239,561	11
Virginia	\$232,111	12
North Carolina	\$227,472	13
Maryland	\$188,705	14
Washington	\$187,050	15
Indiana	\$169,359	16
Minnesota	\$165,333	17
<b>Missouri</b>	<b>\$158,909</b>	<b>18</b>
Wisconsin	\$157,319	19
Tennessee	\$154,843	20
<b>United States</b>	<b>\$8,705,009</b>	

Personal Income Growth 2000 vs. 2001 Top 20 States		
State	% Change Q1-Q2 2000	% Change Q1-Q2 2001
California	2.41%	1.17%
New York	2.18%	1.06%
Texas	2.09%	0.77%
Florida	2.23%	1.19%
Illinois	1.60%	0.68%
Pennsylvania	1.75%	0.61%
Ohio	1.38%	0.68%
New Jersey	3.07%	0.70%
Michigan	1.35%	0.70%
Massachusetts	1.24%	0.98%
Georgia	2.01%	0.99%
Virginia	2.90%	0.87%
North Carolina	2.50%	0.51%
Maryland	1.49%	0.84%
Washington	0.51%	0.43%
Indiana	1.81%	0.59%
Minnesota	2.94%	0.79%
<b>Missouri</b>	<b>2.22%</b>	<b>0.73%</b>
Wisconsin	2.10%	0.41%
Tennessee	1.75%	0.95%
<b>United States</b>	<b>2.06%</b>	<b>0.83%</b>

\*Thousands of dollars, seasonally adjusted at annual rates.





2 <sup>nd</sup> Quarter 2001 Personal Income*		
State	2001 Q2	Ranking
<b>United States</b>	<b>\$8,705,009</b>	
California	\$1,150,660	1
New York	\$695,753	2
Texas	\$614,117	3
Florida	\$470,691	4
Illinois	\$414,130	5
Pennsylvania	\$380,549	6
Ohio	\$327,289	7
New Jersey	\$324,898	8
Michigan	\$297,261	9
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Indiana	\$169,359	16
Minnesota	\$165,333	17
<b>Missouri</b>	<b>\$158,909</b>	<b>18</b>
Wisconsin	\$157,319	19
Tennessee	\$154,843	20
Colorado	\$147,484	21
Connecticut	\$147,235	22
Arizona	\$135,011	23
Alabama	\$108,464	24
Louisiana	\$106,883	25
Kentucky	\$101,872	26
South Carolina	\$101,054	27
Oregon	\$98,986	28
Oklahoma	\$85,095	29
Iowa	\$79,698	30
Kansas	\$77,084	31
Nevada	\$63,249	32
Mississippi	\$61,523	33
Arkansas	\$61,420	34
Utah	\$54,985	35
Nebraska	\$48,446	36
New Hampshire	\$43,251	37
New Mexico	\$42,260	38
West Virginia	\$40,919	39
Hawaii	\$35,106	40
Maine	\$34,276	41
Rhode Island	\$32,190	42
Idaho	\$32,039	43
Delaware	\$25,483	44
District of Columbia	\$22,833	45
Montana	\$21,305	46
South Dakota	\$20,085	47
Alaska	\$19,423	48
Vermont	\$17,369	49
North Dakota	\$16,636	50
Wyoming	\$14,166	51

Personal Income Growth Q1-Q2 2001		
State	1Q-2Q 01	Rank
<b>United States</b>	<b>0.83%</b>	
Nevada	1.55%	1
New Mexico	1.48%	2
Florida	1.19%	3
California	1.17%	4
Wyoming	1.11%	5
New York	1.06%	6
Delaware	1.04%	7
Montana	1.00%	8
Georgia	0.99%	9
Massachusetts	0.98%	10
Colorado	0.96%	11
Tennessee	0.95%	12
Idaho	0.92%	13
District of Columbia	0.89%	14
Kansas	0.87%	15
Rhode Island	0.87%	16
Virginia	0.87%	17
South Carolina	0.86%	18
Alaska	0.85%	19
Maryland	0.84%	20
Arizona	0.82%	21
Oregon	0.81%	22
Minnesota	0.79%	23
Texas	0.77%	24
Hawaii	0.77%	25
Oklahoma	0.76%	26
New Hampshire	0.76%	27
<b>Missouri</b>	<b>0.73%</b>	<b>28</b>
New Jersey	0.70%	29
Connecticut	0.70%	30
Michigan	0.70%	31
Illinois	0.68%	32
Ohio	0.68%	33
Vermont	0.68%	34
Pennsylvania	0.61%	35
Maine	0.60%	36
Indiana	0.59%	37
Utah	0.58%	38
Louisiana	0.55%	39
South Dakota	0.55%	40
Arkansas	0.54%	41
North Carolina	0.51%	42
Mississippi	0.50%	43
Kentucky	0.50%	44
Washington	0.43%	45
Nebraska	0.42%	46
Wisconsin	0.41%	47
Alabama	0.39%	48
West Virginia	0.35%	49
Iowa	0.24%	50
North Dakota	0.15%	51

\*Thousands of dollars, seasonally adjusted at annual rates.

## Consumer Confidence

Consumer confidence fell for the fifth consecutive month in November. The Conference Board *Consumer Confidence Index* was 82.2, dropping 3.1 points from the revised 85.3 in October. Economists' forecasted index for November was 86.5. The Consumer Confidence Survey is based on a representative sample of 5,000 U.S. households.

The Present Conditions Index, which is a factor in the total composite index, fell 13.7 points in November, following an 18-point drop in October. This index is a measure of how consumers perceive the current state of the economy. Since August 2001, the Present Conditions Index has dropped more than 50 points. On a positive note, the Expectations Index, a measure of future economic activity, increased 3.9 points in November to 74.6.

The updated November University of Michigan's *Consumer Sentiment Index*, a comparable index, experienced an increase in the composite score to 83.9 from 82.7 last month. The component indices increased slightly in November as well. The Present Conditions Index was 95.3 up from 94.0 in October, and Expectations increased just over a point to 76.6.

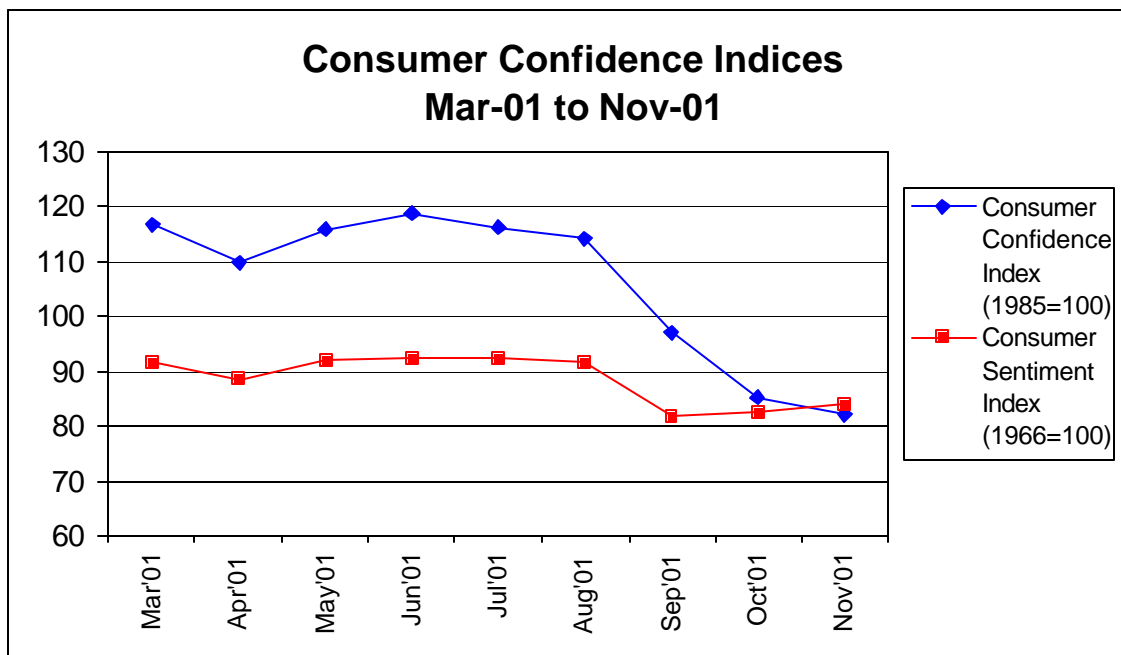
The interesting aspect of each consumer confidence survey in November is the Expectations Index. While the University of Michigan's Consumer Sentiment Index has seen improvement in previous months, the Conference Board November Expectations Index showed its first improvement since August. Increases in Expectations indices suggest that although the economy is struggling now, consumers anticipate improvement in the future.

Consumer spending accounts for two-thirds of the economy, so these indices are watched closely. Analysts predict consumer spending for the holiday season to be sluggish and reserved as the economy remains uncertain. Additionally, this week, the National Bureau of Economic Research officially declared the U.S. to be in recession. However, the recession is predicted to be relatively brief.

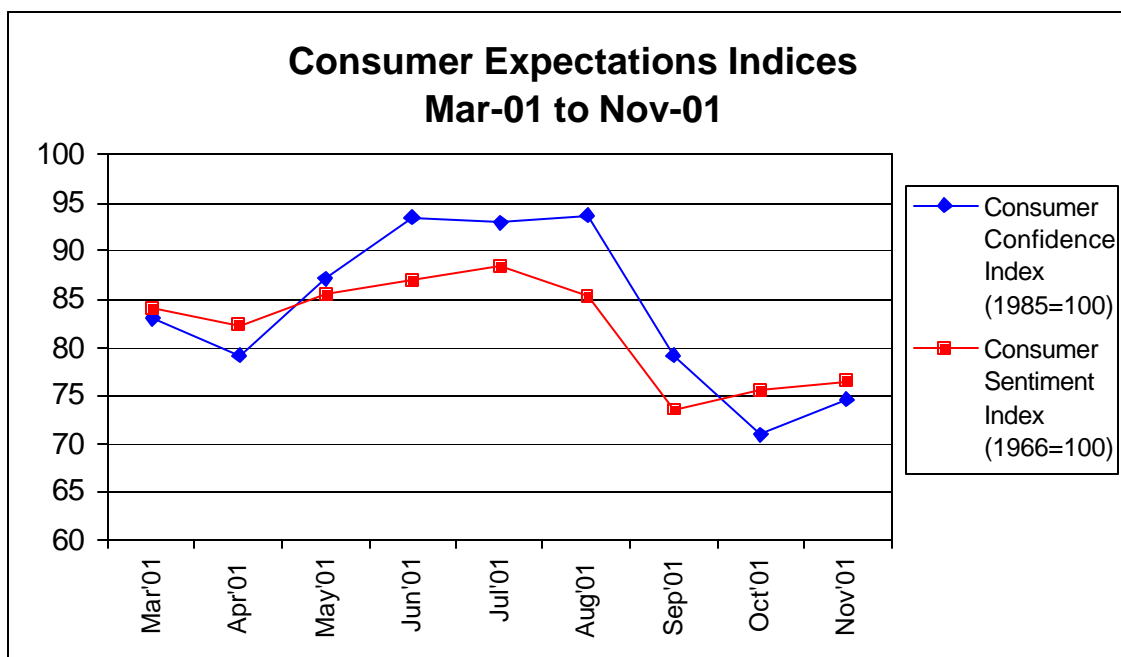
Taken together, current information points to continued economic struggle through the winter, and a likely strengthening through next summer. In an effort to boost the economy, the Federal Reserve is expected to cut interest rates again in December.

Sources: [www.cnnfn.com](http://www.cnnfn.com), 11/27/01  
[www.conference-board.com](http://www.conference-board.com), 11/27/01  
[www.economy.com](http://www.economy.com), 11/27/01





Source: [www.economy.com](http://www.economy.com)



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## Regional Taxable Sales

The St. Louis Metropolitan region accounted for 40.4 percent of taxable sales in Missouri for the second quarter of 2001. The Kansas City Metropolitan region followed with 21.9 percent. Combined, these two regions made up nearly two-thirds of the state's taxable sales. Springfield was third contributing 9.4 percent. Therefore, the St. Louis Metropolitan region, as a result of its contribution, is the driver of taxable sales in the state.

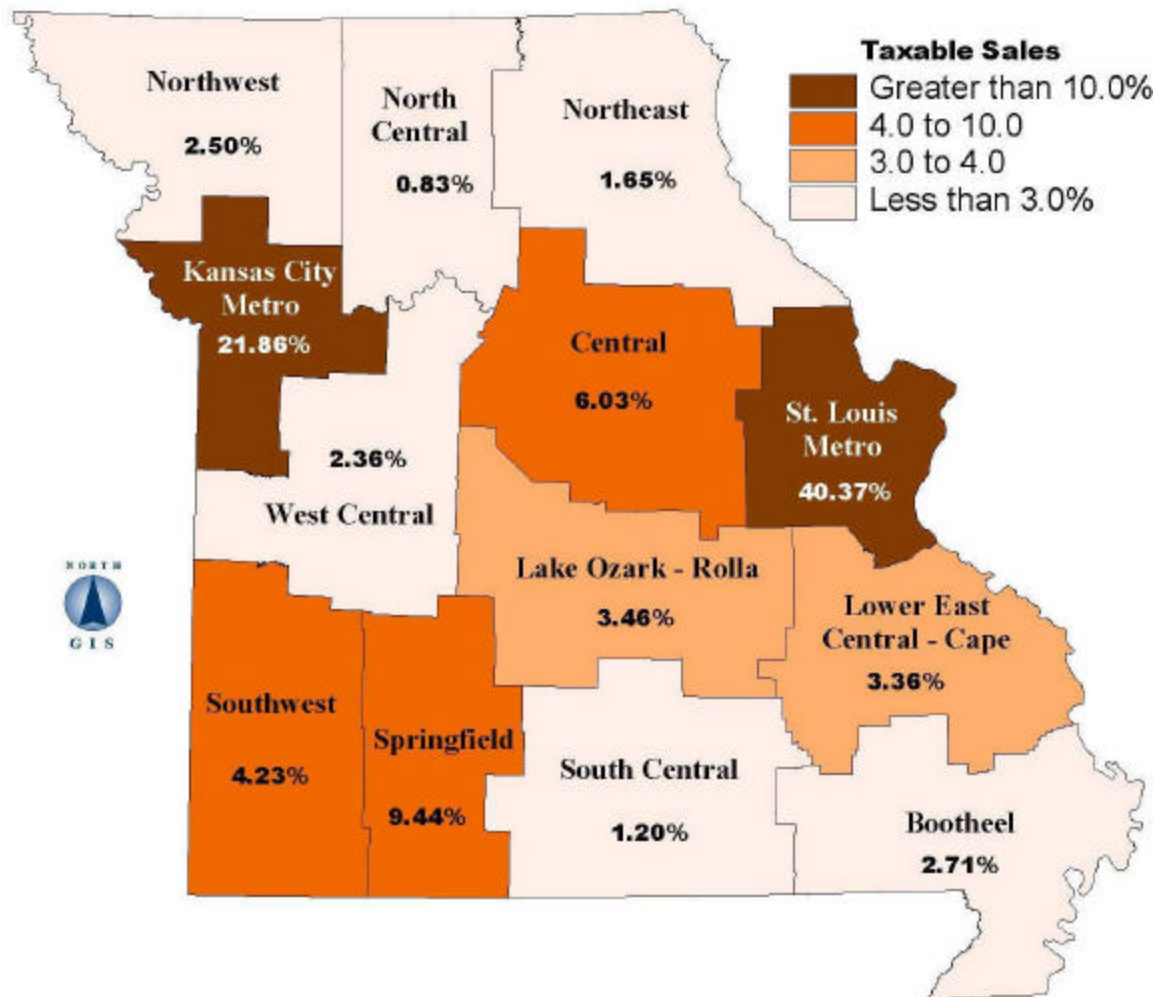
Regions with the least amount of taxable sales contribution for the second quarter were the North Central (0.83 percent), South Central (1.20 percent), and Northeast (1.65 percent) regions.

Taxable sales in the state totaled \$16.3 billion for the second quarter of 2001, a 2 percent increase from the same quarter in 2000. When adjusted for inflation and seasonal effects, however, year-to-year growth for the quarter was -1.3 percent, indicating lagging sales.

<b>Missouri Taxable Sales by Region<sup>5</sup></b> <b>2<sup>nd</sup> Quarter 2001</b> (Adjusted for inflation and season)		
	Sales (M\$)	Percent of MO Taxable Sales
<b>Missouri</b>	16,300.0	- -
Bootheel	411.7	2.71%
Central	915.8	6.03%
Kansas City Metro	3,322.6	21.86%
Lower East Central-Cape	511.1	3.46%
Lake Ozark-Rolla	525.9	3.36%
North Central	125.8	0.83%
Northeast	250.2	1.65%
Northwest	379.5	2.50%
South Central	182.7	1.20%
Springfield	1,434.5	9.44%
St. Louis Metro	6,136.7	40.37%
Southwest	643.6	4.23%
West Central	359.3	2.36%

<sup>5</sup> Regional taxable sales data do not include figures for the consumer use, out-of-state, and miscellaneous categories, causing totals to be slightly varied from state totals.

Taxable Sales Contribution: Regional Percent of State Total  
2<sup>nd</sup> Quarter 2001



## Purchasing Managers' Index (PMI)

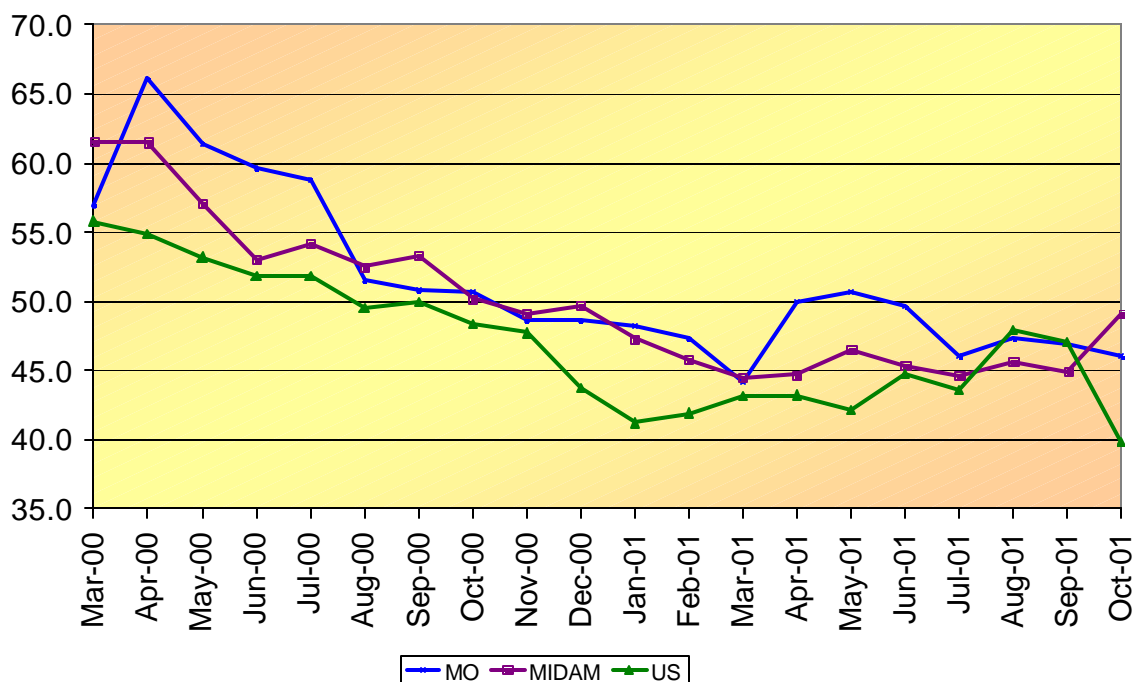
Missouri's Purchasing Managers' Index (PMI) score slipped from 46.9 in September to 46 in October, according to the monthly *Mid-American Business Conditions Survey*, conducted by Creighton University, Omaha, NE.

The decrease marked the eighth time in the first ten months of 2001 that Missouri's PMI score remained below 50. Economists consider the index, which measures such factors as new orders, production, supplier delivery times, backlogs, inventories, prices, employment, import orders and exports, a key economic indicator. Typically, a score greater than 50 indicates an expansionary economy, while a score below 50 forecasts a sluggish economy for the next three to six months.

Weak new orders of 47.1, and employment of 36.8, offset stronger than expected October production of 50.0. The considerable weakness in both durable and non-durable goods manufacturers is now negatively impacting Missouri's service sector, according to researchers.

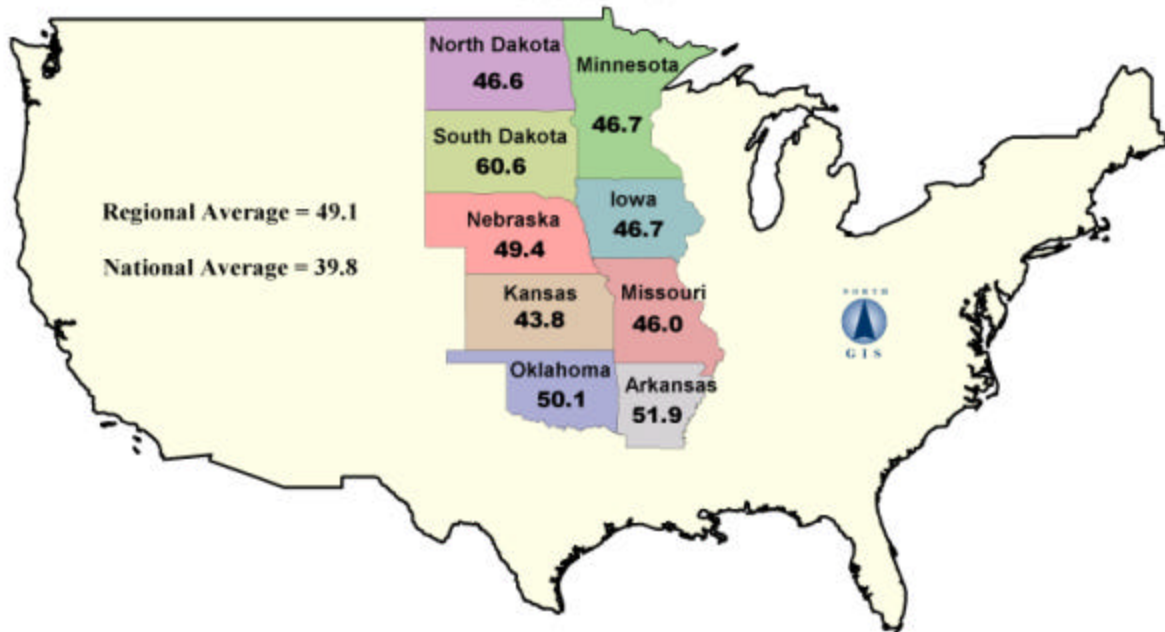
Despite the October slip, Missouri found itself above the nationwide index for the first time in three months. The national PMI fell drastically from 47 in September to 39.8 in October.

Purchasing Manager's Index



## Mid-America Purchasing Managers' Index

October 2001



The state's PMI score placed it eighth among the nine states included in the Mid-America region. South Dakota posted the region's highest PMI rate with 60.6, while Kansas' 43.8 was the lowest. Other states in the regional survey included: Arkansas, 51.9; Oklahoma, 50.1; Nebraska, 49.4; Iowa and Minnesota, 46.7, and North Dakota, 46.6.

Overall, the average for the Mid-America Region was 49.1, up from September's 44.9. The national PMI score marked the 15<sup>th</sup> consecutive month that the national PMI was below 50 and the lowest such score since February 1991.

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